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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/273,149	03/19/1999	KEVIN M. PINTAR	22074661-255	6715
7590 04/19/2007				
Robert F. Jaworski, Esq. COOPER & DUNHAM LLP 1185 Avenue of the Americas New York, NY 10036		EXAMINER PAULA, CESAR B		
		ART UNIT 2178		PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/273,149

Applicant(s)

PINTAR ET AL.

Examiner

CESAR B. PAULA

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15,18-23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15,18-23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is responsive to the RCE amendment, and drawings filed on 2/15, and 3/5/2007.

**This action is made Non-Final.**

2. In the amendment, claim 24 has been canceled. Claim 27 has been added. Claims 1-15, 18-23, and 25-27 are pending in the case. Claims 1, 8, 15 and 23 are independent claims.
3. The rejections of claims 1-6, 8-12, 15, and 18-19 rejected under 35 U.S.C. 102(e) as being anticipated by Allen et al, hereinafter Allen (Pat.# 6,502,236, 12/31/2002, filed on 3/16/1999), have been withdrawn as necessitated by the amendment.
4. The rejections of claims 7, 14 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, in view of DaSilva (Pat. # 6,493,868, 12/10/2002, provisional application filed on 11/2/1998), have been withdrawn as necessitated by the amendment.
5. The rejection of claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, has been withdrawn as necessitated by the amendment

### *Drawings*

6. The drawings filed on 3/5/2007 have been accepted by the Examiner.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 27 recites the limitation "the input and output lengths" in line 2. There is insufficient antecedent basis for this limitation in the claim. There are no previous "input and output lengths" to refer to in this or its independent claim. Claim 1 refers to first input, and second output data types, but no "input and output lengths".

10. The rejection of claim 24 rejected under 35 U.S.C. 112, first paragraph, has been withdrawn as necessitated by the amendment.

11. The rejection of claim 24 under 35 U.S.C. 112, second paragraph, as failing to comply with the enablement requirement, has been withdrawn as necessitated by the amendment.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2178

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 1-6, 8-13, 15, and 18-19, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (Pat.# 6,502,236, 12/31/2002, filed on 3/16/1999), in view of Lemay et al, hereinafter Lemay, "Laura Lemay's Web Workshop ActiveX and VBScript", 12/96, Sams, pp.69-75, 116-123.

Regarding independent claim 1, Allen discloses the automatic generation by an application, such as a forwarding device, of a program based on a number of received input, and output format descriptors—*first, and second attributes--*, such as Ethernet, and IP formats—*input and output data types* (col. 2, lines 28-67, col. 10, lines 33-47).

Moreover, Allen teaches the automatic generation in real-time—*dynamically creating at runtime--* of a conversion program—*first optimized conversion routine--* such as an assembler program, based on the input, and output format descriptors. The conversion program or translator has methods—*computer instructions*—for interpreting format descriptors, and convert data units from a first to a second format through or during the interpretation or executing of these methods (col. 2, lines 28-67, and col.4, lines 51-65).

Furthermore, Allen teaches the compilation of a generated program translation objects by a fast compiler, and the execution of the program, by a modification engine —*application--* to convert a received data unit to an output data unit described by the input, and output format descriptors, such as Ethernet, and IP formats, which are not dependent on or different from each other (col. 2, lines 28-38, 57-67, col.3, lines 54-67, col.4, lines 35-65, and col. 6, lines 1-67,

Art Unit: 2178

fig.2). Allen fails to explicitly teach *validating specific field conversion options of the conversion routine*. Lemay discloses checking to ensure that ASCII values, and numbers are within prescribed limits, if not generating a message indicating violation of the rules (page 117, parag. 4-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to have verified that the input and output values are the proper lengths, because of all the reasons found in Lemay including the proper definition of data types to allocate the right amount of memory space (page 70). This would have prevented errors caused by memory misallocation, overruns, and would enable the conversion routines to performed as designed.

Regarding claim 2, which depends on claim 1, Allen teaches the execution—*calling--* of the program-*first optimized routine--*, by an implementation of the forwarding device—*application--* to convert a received data unit to an output data unit described by the input, and output format descriptors, such as Ethernet, and IP formats, which are not dependent on or different from each other (col. 2, lines 20-38, 50-67, col.3, lines 49-67, and fig.2).

Regarding claim 3, which depends on claim 1, Allen teaches the execution of the program-*first optimized routine--*, by a modification engine—*application--*, for converting between the two formats, where the program executes from within the modification engine, which is part of the forwarding device system (fig.2) or is stored inline with the forwarding device application (col. 2, lines 20-38, 57-67, col.3, lines 40-42, 50-67).

Art Unit: 2178

Regarding claim 4, which depends on claim 1, Allen discloses the automatic generation in real time by an application—*step b performed dynamically while the application executes translation steps--*, such as a forwarding device, of a program based on a number of received input, and output format descriptors—*first, and second attributes--*, such as Ethernet, and IP formats (col. 2, lines 20-67, col. 3, lines 50-67, and col. 10, lines 33-47).

Regarding claim 5, which depends on claim 1, Allen discloses the automatic generation by an application, such as a forwarding device, of a program based on a number of received input, and output format descriptors, such as word objects 62, and 68—*third, and fourth attributes--*, such as Ethernet, and IP formats—*input and output data types* (col. 2, lines 28-67, col. 10, lines 33-47, and col. 6, lines 38-64, ).

Moreover, Allen teaches the automatic generation in real-time—*dynamically creating at runtime--* of a new translator for each of the word objects—*second optimized conversion routine--* such as an assembler program, based on the input, and output format descriptors (col. 2, lines 28-67, and col. 4, lines 51-65, and col. 6, lines 38-64).

Furthermore, Allen teaches the execution of the program, by a modification engine — *application--* to convert a received data unit to an output data unit described by the input, and output format descriptors, such as Ethernet, and IP formats, which are not dependent on or different from each other (col. 2, lines 28-38, 57-67, col. 3, lines 54-67, and col. 6, lines 38-64 fig. 2).

Art Unit: 2178

Regarding claim 6, which depends on claim 1, Allen discloses the automatic generation in real-time of a new translator for converting data types, such as alphabetic characters (col. 2, lines 28-67, and col.4, lines 16-65).

Claim 8 is directed towards a method for implementing the steps found in claim 5, and therefore is similarly rejected.

Regarding claim 9, which depends on claim 8, Allen teaches Allen's inclusion of conversion programs partly or in whole (col.10, lines 26-32). In other words, the size of the computer code is chosen. The size chosen is either a small portion of the program or entire conversion functions-- *determining the size of the data conversion routine for each of the plurality of sets of input attributes and output attributes.*

Regarding claim 10, which depends on claim 8, Allen teaches the storage of the translators in the forwarding device system (fig.2) or is stored inline with the forwarding device application (col. 2, lines 20-38, 57-67, col.6, lines 29-50)-- *determining whether the data conversion routine for each of the plurality of sets of input attributes and output attributes should be stored inline with said application program.*

Regarding claim 11, which depends on claim 8, Allen discloses the automatic generation in real time by an application—*step c performed dynamically while the application executes translation steps--*, such as a forwarding device, of a program based on a number of received



Art Unit: 2178

input, and output format descriptors—*first, and second attributes--*, such as Ethernet, and IP formats (col. 2, lines 20-67, col. 3, lines 50-67, col. 6, lines 29-63, and col. 10, lines 33-47).

Regarding claim 12, which depends on claim 8, Allen discloses the automatic generation in real-time of a new translator for converting data types, such as alphabetic characters (col. 2, lines 28-67, and col.4, lines 16-65).

Regarding claim 13, which depends on claim 8, Allen discloses the automatic generation in real-time of a new translator for converting data types, such as alphabetic characters (col. 2, lines 28-67, and col.4, lines 16-65). Allen fails to explicitly teach *said input and output attributes are date type*. It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the date type, because Allen teaches a system that is fast enough to handle new operational requirements as they are received (col.2, lines 15-24, 61-67), thus saving time.

Claims 15, and 18-19 are directed towards a computer system for implementing the steps found in claims 8, and 11-13 respectively, and are similarly rejected.

Claims 21-22 are directed towards a computer system for implementing the steps found in claims 9-10 respectively, and therefore are similarly rejected.

Art Unit: 2178

Claims 23, 25 are directed towards a logic encoded in a computer-readable medium for implementing the steps found in claims 5, and 10 respectively, and therefore are similarly rejected.

Regarding claim 27, which depends on claim 1, Allen discloses the automatic generation in real-time of a new translator for converting data types, such as alphabetic characters (col. 2, lines 28-67, and col.4, lines 16-65). Allen fails to explicitly teach *validating specific field conversion options of the conversion routine comprises verifying that the input and output lengths are correct*. Lemay discloses checking to ensure that ASCII values, and numbers are within prescribed limits, if not generating a message indicating violation of the rules (page 117, parag. 4-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to have verified that the input and output values are the proper lengths, because of all the reasons found in Lemay including the proper definition of data types to allocate the right amount of memory space (page 70). This would have prevented errors caused by memory misallocation, overruns, and would enable the conversion routines to performed as designed.

14. Claims 7, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, in view of Lemay as applied to claim 1 above, and further in view of DaSilva (Pat. # 6,493,868, 12/10/2002, provisional application filed on 11/2/1998).

Art Unit: 2178

Regarding claim 7, which depends on claim 1, Allen discloses the automatic generation in real-time of a new translator for converting data types, such as alphabetic characters (col. 2, lines 28-67, and col.4, lines 16-65). Allen fails to explicitly teach *generating program debugging instrumentation*. DaSilva discloses: allowing developers to visually probe, trace, and monitor DSP application's real time performance using breakpoints, probe points (col.2, lines 35-col.3, line 9). It would have been obvious to one of ordinary skill in the art at the time of the invention to have debugged the routine, because Mcallum teaches above, the visual probing, tracing and monitoring DSP applications with minimal impact to the real time performance of the applications.

Claims 14, and 20 are directed towards a computer system for implementing the steps found in claim 7, and therefore are similarly rejected.

Claim 26 is directed towards a logic encoded in a computer-readable medium for implementing the steps found in claim 7, and therefore is similarly rejected.

### ***Response to Arguments***

15. Applicant's arguments filed on 2/15/2007 have been fully considered but they are not persuasive. Regarding claims 1, 8, 15, and, 23 the Applicants indicates that Allen does not teach the validation of conversion options (page9). The Applicants are directed towards the rejection of this limitation in light of the newly found reference applied above.

***Conclusion***

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cantey et al. (Pat. # 5,907,709 A).

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cesar B. Paula whose telephone number is (571) 272-4128. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m. (EST).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on (571) 272-4124. However, in such a case, please allow at least one business day.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://portal.uspto.gov/external/portal/pair>. Should you have any questions about access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866 217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 or 571 272-1000 (USA or Canada).

Any response to this Action should be mailed to:  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Or faxed to:

Art Unit: 2178

- (571)-273-8300 (for all Formal communications intended for entry)

  
**CESAR PAULA**  
**PRIMARY EXAMINER**  
4/17/2007